

## 7th SOPHIA PV-Module Reliability Workshop, July 6. - 7., 2017

Venue: Solar Info Center, Emmy-Noether-Strasse 2, 79110 Freiburg, Germany

THU 6 <sup>th</sup>	Topic	Speaker (Company)	Room
08:00-09:00	Registration & Welcome		
08:00-08:30	a) Registration		Foyer
08:30-09:00	b) Welcome	Andreas Bett (ISE Freiburg, GER)	Plenum
	c) ISE Introduction	Harry Wirth (ISE Freiburg, GER)	Plenum
	d) Agenda and Topics	Michael Köhl (ISE Freiburg, GER)	Plenum
09:00-10:30	Block I "New applications of PV modules providing new challenges for performance and durability assessment"	Chairman: Werner Herrmann	
	a) Testing of PhotoVoltaicThermal modules	Korbinian Kramer (ISE Freiburg, GER)	Plenum
	b) Application of PV modules for BIPV - new challenges for performance and durability assessment and the European response	Helen Rose Wilson (ISE Freiburg, GER)	Plenum
	c) Standardised performance measurements of BiFacial Modules and special impact on durability assessment	Nicolas Bassi (Meyer Burger, Pasan, CH)	Plenum
10:30-11:00	Coffee Break		Foyer
11:00-12:30	Block II "Innovative devices providing new challenges for performance and durability assessment"	Chairman: Ralph Gottschalg	
	a) Performance and quality testing of CPV	Gerald Siefer (ISE Freiburg, GER)	Plenum
	b) Reliability aspects of novel module technologies: Interconnection with Multibusbar, conductive adhesives or low-temperature soldering	Uli Eitner (ISE Freiburg, GER)	Plenum
	c) Durability aspects of organic PV-alternatives for the future	Martin Hermenau (Heliatek, GER)	Plenum
12:30-13:30	LUNCH		
13:30-14:00	International activities	Chairman: Karl-Anders Weiss	
	a) PVQAT	Peter Hacke (NREL, USA)	Plenum
	b) IEA-PVPS-Task13	Ulrike Jahn (TUV Rheinland, GER)	Plenum
	c) NREL-Module Reliability Workshop	Peter Hacke (NREL, USA)	Plenum
	d) SAYURI-PV Workshop Activities	Keiichiro Sakurai (AIST, Japan)	Plenum
14:00-16:00	Block III "New stresses"	Chairman: Michael Köhl	
	a) The effect of sandblasting on module glazing	Boris Agea Blanco (BAM, GER)	Plenum
	b) Novel Anti-Soiling Coatings to enhance PV plant output and financial performance	Ian Bennett (DSM, NL)	Plenum
	c) Thermo-mechanics or only mechanics?	Rico Meier (IMWS Halle, GER)	Plenum
	d) Multi-Stress chamber	Gerhard Kleiss (SWIN, GER)	Plenum
16:00-16:30	Coffee Break		
16:30 -18:00	Block IV "UV and light"	Chairman: Peter Hacke	
	a) New approaches for solar simulator classification and impact on measurement precision for PV modules	Werner Herrmann (TUV Rheinland, GER)	Plenum
	b) LEDs instead of broad-band irradiation	Peter Fuß-Kailuweit (Wavelabs, GER)	Plenum
	c) Effects of UV Light intensity and Wavelength on Degradation of PV Backsheets and Laminates	Xiaohong Gu (NIST, USA)	Plenum
19:00	DINNER at Schlossberg-Restaurant Dattler		
FRI 7 <sup>th</sup>	Topic	Speaker (Company)	Room
09:00-10:00	Block V "New equipment"	Chairman: Gernot Oreski	
	a) Multi-Stress cabinet for mini-module aging – examination of laminate aging using luminescence spectroscopy	Beate Röder (HU Berlin, GER)	Plenum
	b) Combined Stress testing with In-situ measurements for PV devices: a case study for Cu(In,Ga)Se2 solar cells	Pepijn Veling (Eternal Sun, NL) & Mirjam Theelen (TNO, NL)	Plenum
10:00-10:30	Coffee Break		
10:30-12:30	Block VI "New combined cycles"	Chairman: Tony Sample	
	a) New combined cycles provide new options and challenges for durability assessment	Axel Borne (Dupont, CH)	Plenum
	b) New combined cycles provide new options and challenges for durability assessment	Michael Köhl (ISE Freiburg, GER)	Plenum
	c) New combined cycles provide new options and challenges for durability assessment - Combined-Accelerated Stress Testing (C-AST)	Peter Hacke (NREL, USA)	Plenum
	d) Combined-/Sequential-Tests: Experiences in Japan	Keiichiro Sakurai (AIST, Japan)	Plenum
12:30-13:30	LUNCH		Foyer
13:30-14:30	Group Discussion: "Future ALT standards"		Room A-C
14:30-15:00	a) New combined cycles for future test standards in IEC TC82 WG2	Tony Sample (convenor of IEC TC82 WG2)	Plenum
15:00-16:00	Plenary Discussion & Sum Up	Karl-Anders Weiss, Michael Köhl	Plenum
16:00-17:00	Coffee and Optional: ISE/TLPV Lab Tour		Foyer